



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D205-634-041
Job Sheet 201219



Part No: D205-634-041

Job Qty: 1 pcs

Part Name: Replacement Skidtube with Standard Wearplates Fits LH or RH



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 9/27/19

Job Tracking No:

Due Date: 10/25/19

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG D2580 REV H SHEETS 1,2,3,8 IPP Rev:N 02.08.28 FP was QC5 in Step 27; Added QC5 to Step 30 KJ IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD IPP Rev. O 06.02.28 Added paperwork EC IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM IPP Rev:Q 10.12.01 as per chg003 DD ver:EC IPP REV:R 12.01.23 AS PER ECN11-684 VERF:EC IPP REV:S 17.12.08 REMOVE GASKET AS PER INTUITIVE INFO DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Skidtubes - Bend - 1	1 pcs		10/25/19	0.00	0.65	Skidtubes - Bend		MCL
120	Skidtubes - 2 - B4B	1 pcs		10/25/19	0.00	2.89	Skidtubes - 1 - B4B		
							Skidtubes - 2 - B4B		
							Skidtubes - 3 - B4B		MCL
							Skidtubes - 4 - B4B		
							Skidtubes - 5 - B4B		BE
							Skidtubes - 6 - B4B		
							Skidtubes - 7 - B4B		
130	QC 5	1 pcs		10/25/19	0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		BE
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
							QC 5 - 61		
							QC 5 - 81		



Container No: S228004



Part: D205-634-041

Job No: 201219

Serial No/Batch: S228004

Revision: H

Inspector:

Exp Date:

Instructions: TC STC SH96-88 Issue 2, FAA STC SR005631

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

9/27/2019

[Dart Hawkesbury] Job Sheet - Lajeunesse, Marie

140 Skidtubes - 3 - B4B	1 pcs	10/25/19	0.00 3.00	Skidtubes - 1 - B4B	
				Skidtubes - 2 - B4B	
				Skidtubes - 3 - B4B	MCH
				Skidtubes - 4 - B4B	
				Skidtubes - 5 - B4B	BE
				Skidtubes - 6 - B4B	
				Skidtubes - 7 - B4B	
150 QC 10	1 pcs	10/25/19	0.00 0.00	QC 10 - 10	
				QC 10 - 18	
				QC 10 - 24	
				QC 10 - 43	
				QC 10 - 50	
				QC 10 - 58	
				QC 10 - 9	
160 QC 5	1 pcs	10/25/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
170 Handfinish - 1-1 Chemical-B4B	1 pcs	10/25/19	0.00 1.31	Handfinish - 1 - 1 - B4B	
				Handfinish - 1 - 2 - B4B	
				Handfinish - 1 - 3 - B4B	
				Handfinish - 1 - 4 - B4B	
				Handfinish - 1 - 5 - B4B	
				Handfinish - 1 - 6 - B4B	
				Handfinish - 1 - 7 - B4B	
				Handfinish - 1 - 8 - B4B	
				Handfinish - 1 - 9 - B4B	
				Handfinish - 1 - 10 - B4B	
				Handfinish - 1 - 11 - B4B	
				Handfinish - 1 - 12 - B4B	
				Handfinish - 1 - 13 - B4B	
				Handfinish - 1 - 14 - B4B	
				Handfinish - 1 - 15 -	

NOV 14 2019
DAS 68
9-89

NOV 14 2019
DAS 68
9-89

BEF 19-11-15

Plex 9/27/19 10:51 AM Dart.lajeunesse.marie

				B4B	
				Handfinish - 1 - 16 - B4B	
				Handfinish - 1 - 17 - B4B	
				Handfinish - 1 - 18 - B4B	
				Handfinish - 1 - 19 - B4B	
				Handfinish - 1 - 20 - B4B	
				Handfinish - 1 - 21 - B4B	
				Handfinish - 1 - 22 - B4B	
M211886.				Powdercoat - 1 - B4B	
180 Powdercoat - 1 White GI(A)-B4B	1 pcs	10/25/19	0.00 0.34	Powdercoat - 2 - B4B	
START: 10:15 Q.U.T: 330° FINISH: 10:45				Powdercoat - 3 - B4B	BL 19-11-18.
190 QC 3	1 pcs	10/25/19	0.00 0.00	Powdercoat - 4 - B4B	
				QC 3 - 10	
				QC 3 - 13	
				QC 3 - 15	SL 19-11-19
				QC 3 - 17	
				QC 3 - 18	
				QC 3 - 2	
				QC 3 - 28	
				QC 3 - 3	
				QC 3 - 30	
				QC 3 - 34	
				QC 3 - 36	
				QC 3 - 41	
				QC 3 - 51	
				QC 3 - 58	
				QC 3 - 59	
				QC 3 - 68	
				QC 3 - 9	
				QC 3 - 40	
				QC 3 - 19	
				QC 3 - 43	
				QC 3 - 24	
				QC 3 - 61	
				QC 3 - 81	
200 Handfinish - 4-1-Assembly-B4B	1 pcs	10/25/19	0.00 1.00	Handfinish - 4 - 1 - B4B	SL 19-11-19
				Handfinish - 4 - 10 - B4B	
				Handfinish - 4 - 11 - B4B	
				Handfinish - 4 - 12 - B4B	
				Handfinish - 4 - 13 - B4B	
				Handfinish - 4 - 14 - B4B	
				Handfinish - 4 - 15 - B4B	
				Handfinish - 4 - 2 - B4B	
				Handfinish - 4 - 3 - B4B	
				Handfinish - 4 - 4 - B4B	

210 QC 5	1 pcs	10/25/19	0.00 0.00	Handfinish - 4 - 5 - B4B	
				Handfinish - 4 - 6 - B4B	
				Handfinish - 4 - 7 - B4B	
				Handfinish - 4 - 8 - B4B	
				Handfinish - 4 - 9 - B4B	
				QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
220 Packaging 3-1 - Stock - B4B	1 pcs	10/25/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	

DAS

NOV 20 2019 68

9-89

NL 24/11/19

				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
225 DC - 1 - B4B	1 pcs	10/25/19	0.00 0.00	DC - 1 - B4B	EAS
				DC - 2 - B4B	21
230 QC 21 - FG	1 pcs	10/25/19	0.00 0.00	QC 21 - FG - 21	NOV 21 2019
				QC 21 - FG - 70	DAS
				QC 21 - FG - 53	21

Part Op 110 - Skid tubes - 1-Bend as per program D2580.C on CNC Bender and Folio 16 2-Cut tubes as per Dwg. D2580 - 2 cut
 Descriptions: batch# in aft end of tube

120 - Skid tubes - 1- Deburr ends and remove bending marks 2- Prepare tube for welding as per QSI 004

130 - QC5- Inspect part completeness to step on W/O

140 - Skid tubes 1-Weld step D2576 as per Dwg. D2580 and QSI 004 2-Grind welds on step as per Dwg D2580 3- Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002 and dwg. Hold x-bolt with DT9701 Use tube expander 1/2 x17G to start expansion and finish with 1/2 x 18G to achieve dwg dimension. 4-Drill holes for wearplates using DT 8217 & DT8937, 7.40" from most fwd saddle holes (ref only) Open holes to 19/64", adjust stopper not to hit web. Deburr 5-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Deburr 6-Drill pilot holes for Tow ring using DT8091, open to .640" and Deburr

150 - QC10- Inspect visual per QSI004- ground welds

160 - QC5- Inspect part completeness to step on W/O

170 - Chemical Conversion Coat per QSI005 4.1 - Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd cap out of solution.

180 - White Gloss (Ref: 4.3.5.1) per QSI005 4.3 Alum START TIME: 10:15 OVEN TEMPERATURE: 320°

FINISH TIME: 10:45 M 21886

190 - QC3- Inspect Part Finish

200 - Assemble as per dwg - 1-Install inserts & wearplates as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates A/R Sikaflex-291 5200672 Sikaflex expire date: 20-7-22 Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580 3-Inspect for foreign object per QSI 024 4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive A/R Sikaflex-291 5200675 Sikaflex expire date: 20-7-22 5-Wing Walk as per Dwg D2580 and QSI 005 4.4 Batch: 5209362

210 - QC5- Inspect part completeness to step on W/O - Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

220 - Identify and pack for shipping as per PPPD205-634-041 Location: _____ PPP Rev: _____

225 - Document Control - Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG006

230 - QC21- Final Inspection - Work Order Release

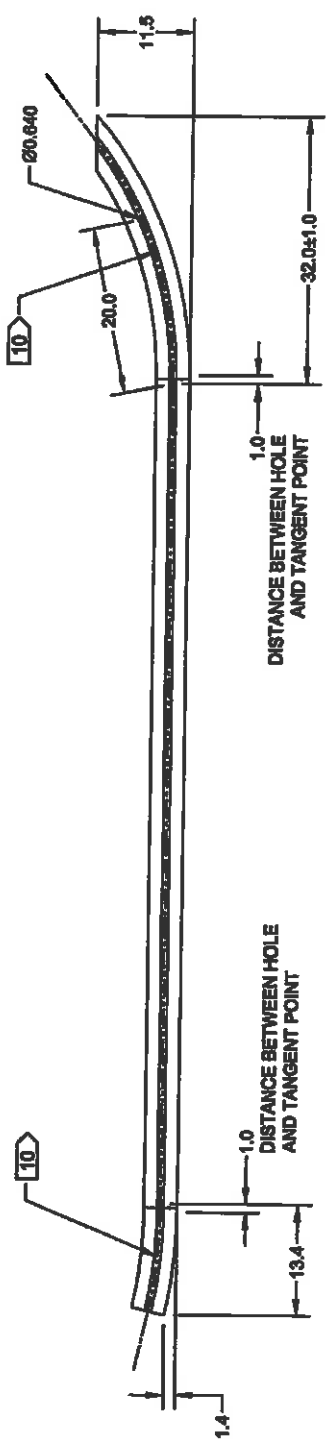
Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2580-1	205 Bent Tube	1 pcs (1 ea)	110-Skid tubes - Bend - 1	5214193
D2576-3	Step (Machining Detail)	1 pcs (1 ea)	140-Skid tubes - 3 - B4B	5177095
D4202-1	Spacer	20 pcs (20 ea)	140-Skid tubes - 3 - B4B	5184047
ALS7-1032-130	Rivnut	50 Ea (50 ea)	200-Handfinish - 4-1-Assembly-B4B	5209194
AN3-5A	Bolt	2 Ea (2 ea)	200-Handfinish - 4-1-Assembly-B4B	5216386
AN3C4A	Bolt	50 Ea (50 ea)	200-Handfinish - 4-1-Assembly-B4B	5228681
D2594-1	Plug	16 pcs (16 ea)	200-Handfinish - 4-1-Assembly-B4B	5229062
D2594-3	O-Ring	16 pcs (16 ea)	200-Handfinish - 4-1-Assembly-B4B	5045947
D2855	Cap	1 pcs (1 ea)	200-Handfinish - 4-1-Assembly-B4B	5194524
D3564-11	Wearplate Aft	1 pcs (1 ea)	200-Handfinish - 4-1-Assembly-B4B	5196397
D3564-13	Wearpad Fwd	1 pcs (1 ea)	200-Handfinish - 4-1-Assembly-B4B	5207800
D3564-5	Wearplate Center	1 pcs (1 ea)	200-Handfinish - 4-1-Assembly-B4B	5208675
D3564-9	Wearplate Fwd	1 pcs (1 ea)	200-Handfinish - 4-1-Assembly-B4B	5208809
NAS1149C0332R	Washer (AN960C10L)	50 Ea (50 ea)	200-Handfinish - 4-1-Assembly-B4B	5225629
NAS1149D0332J	Washer	2 Ea (2 ea)	200-Handfinish - 4-1-Assembly-B4B	5178372

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
110-Skidtubes - Bend - 1	D2580-1	1	11	0
	D2576-3	1	70	0
140-Skidtubes - 3 - B4B	D4202-1	20	700	0
	ALS7-1032-130	50	1,502	0
200-Handfinish - 4-1-Assembly-B4B	AN3-5A	2	272	0
	AN3C4A	50	484	0
	D2594-1	16	59	0
	D2594-3	16	466	0
	D2855	1	78	0
	D3564-11	1	9	0
	D3564-13	1	26	0
	D3564-5	1	19	0
	D3564-9	1	18	0
	NAS1149C0332R	50	2,501	0
	NAS1149D0332J	2	1,766	0
Part Specifications				
Specifications could not be found.				

Plex 9/27/19 10:51 AM Dart.lajeunesse.marie

8 7 6 5 4 3 2 1

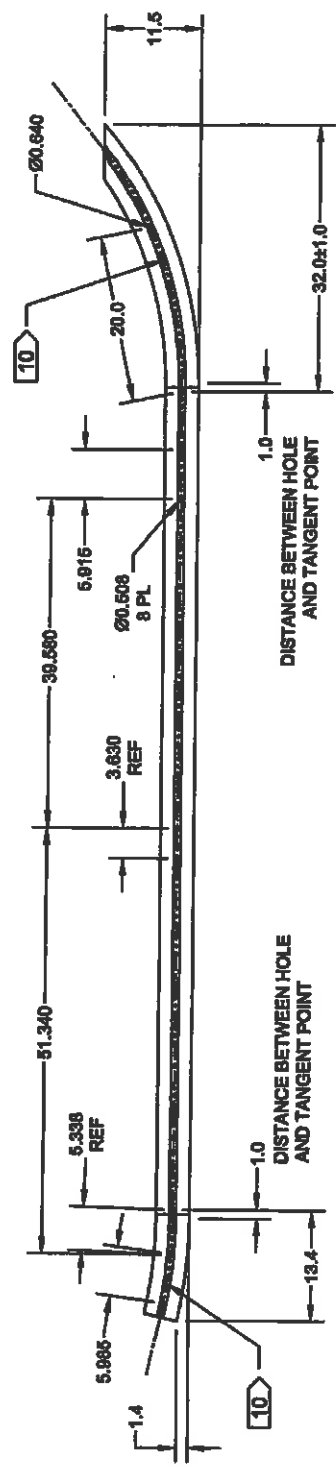


D2580-1 BENT TUBE
(MAKE FROM D2580-101 TUBES)

RELEASED
2017 JUL 05

DESIGN	DS	DART AEROSPACE LTD
DRAWN	SAD	HAWKSBURY, ONTARIO, CANADA
CHECKED		DRAWING NO.
MFG. APPR.		D2580
APPROVED		REV. H
DE APPR.		SHEET 3 OF 8
DATE	17.06.08	TITLE
		206 SKIDTUBE ASSEMBLY
		SCALE
		NTS
COPYRIGHT © 1988 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE IT IS NOT TO BE USED FOR ANY PURPOSES OF DISSEMINATION TO THE PUBLIC WITHOUT PERMISSION		

8 7 6 5 4 3 2 1



D2580-5 BENT TUBE
(MAKE FROM D2580-101 TUBE)

RELEASED
2017 JUL 05

DESIGN	DS	SAID	DART AEROSPACE LTD
CHECKED	SAID	<i>[Signature]</i>	HARTSBURY, ONTARIO, CANADA
MFG. APPR.	SAID	<i>[Signature]</i>	DRAWING NO. D2580
APPROVED	SAID	<i>[Signature]</i>	REV. H SHEET 8 OF 9
DE APPR.	SAID	<i>[Signature]</i>	SCALE NT8
DATE	17.06.09		TITLE 205 SKIDTUBE ASSEMBLY

THIS DOCUMENT IS PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR THE PURPOSES SPECIFIED ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.

DATE 17.06.09



Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only

NCR No. _____

Job: _____

Part No. _____

DISPOSITION

Rework ☐ ☐ ☐
Scrap ☐ ☐ ☐
Use-as-is ☐ ☐ ☐

DEPARTMENT/PROCESS

Skid-tube ☐ ☐ ☐
Machining ☐ ☐ ☐
Large Fab ☐ ☐ ☐

Cross tube ☐ ☐ ☐
Small Fab ☐ ☐ ☐
Finishing ☐ ☐ ☐

Eng. (Non-AW) ☐ ☐ ☐
Prod. Eng. Coord. ☐ ☐ ☐
Rec/Store/Packaging ☐ ☐ ☐
Engineering ☐ ☐ ☐
Water Jet ☐ ☐ ☐
Supplier ☐ ☐ ☐
Quality ☐ ☐ ☐

Date: _____

Sequence #: _____

QTY Affected: _____

MRB (QS1042)

Description Work Order Deviation

Disposition

Completed By _____

Lead hand / Supervisor _____

QC / QA Coordinator _____

Root Cause

Operator ☐ ☐ ☐ ☐ ☐ ☐
Manufacturing Process ☐ ☐ ☐ ☐ ☐ ☐
Equip/Tooling ☐ ☐ ☐ ☐ ☐ ☐
Handling/Preservation ☐ ☐ ☐ ☐ ☐ ☐
Material ☐ ☐ ☐ ☐ ☐ ☐
Product Improvement ☐ ☐ ☐ ☐ ☐ ☐
Process Improvement ☐ ☐ ☐ ☐ ☐ ☐
Human Factors ☐ ☐ ☐ ☐ ☐ ☐

FAULT CATEGORY

Pressure/Forced ☐ ☐ ☐ ☐ ☐ ☐
Bending ☐ ☐ ☐ ☐ ☐ ☐
Crushing ☐ ☐ ☐ ☐ ☐ ☐
Cracks ☐ ☐ ☐ ☐ ☐ ☐
Crimp/Kink/Ripple/Wave/Twist ☐ ☐ ☐ ☐ ☐ ☐
Marks/Chatter ☐ ☐ ☐ ☐ ☐ ☐
Mislabeled ☐ ☐ ☐ ☐ ☐ ☐
Other/Details: _____

Contamination ☐ ☐ ☐ ☐ ☐ ☐
Misaligned/off center ☐ ☐ ☐ ☐ ☐ ☐
BOM/Route ☐ ☐ ☐ ☐ ☐ ☐
Broken/Damage/Defect ☐ ☐ ☐ ☐ ☐ ☐
Incomplete/Unclear Instructions ☐ ☐ ☐ ☐ ☐ ☐
Drill Holes ☐ ☐ ☐ ☐ ☐ ☐
Fit/Function ☐ ☐ ☐ ☐ ☐ ☐

Power Loss/Surge ☐ ☐ ☐ ☐ ☐ ☐
Folio/Program ☐ ☐ ☐ ☐ ☐ ☐
Grain Direction ☐ ☐ ☐ ☐ ☐ ☐
Weld ☐ ☐ ☐ ☐ ☐ ☐
Wrong Stock Pulled ☐ ☐ ☐ ☐ ☐ ☐
Out of Sequence ☐ ☐ ☐ ☐ ☐ ☐
Off-set/Set-up ☐ ☐ ☐ ☐ ☐ ☐

Positioned Wrong ☐ ☐ ☐ ☐ ☐ ☐
Outside Tolerance ☐ ☐ ☐ ☐ ☐ ☐
Drawing ☐ ☐ ☐ ☐ ☐ ☐
Finish ☐ ☐ ☐ ☐ ☐ ☐
Part Lost/Missing ☐ ☐ ☐ ☐ ☐ ☐
Misread ☐ ☐ ☐ ☐ ☐ ☐